Arrhythmias

CHADS2 AND CHA2DS2VASC SCORES AS PREDICTORS OF ATRIAL FIBRILLATION ABLATION SUCCESS

Poster Contributions
Poster Sessions, Expo North
Saturday, March 09, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Arrhythmias: AF/SVT IV
Abstract Category: 4. Arrhythmias: AF/SVT
Presentation Number: 1152-56

Authors: *Ismail Hamam, Emile Daoud, Marshall Winner, German Kamalov, Jose Torres, Raul Weiss, Steven Kalbfleisch, Mahmoud Houmsse, Ralph Augostini, Charles Love, Zhenguo Liu, Jaret Tyler, Molly Sachdev, Troy Rhodes, John Hummel, The Ohio State University, Columbus, OH, USA*

Background: CHADS2 and CHA2DS2VASc scores are assessed in most patients treated for atrial fibrillation (AF) to assess the risk of the thromboembolic complications and to guide the use of anticoagulation. It is unclear if these scores can predict the success and complication rates of catheter based ablation of AF.

Methods: We completed a retrospective review of 274 consecutive patients undergoing AF ablation over 23 months. Baseline demographics, type of AF, ablation technique, peri-procedure complications and calculated CHADS2 and CHA2DS2VASc scores were assessed in relation to recurrence of AF >30 seconds at short and long term follow up.

Results: A total of 274 patients (59.2 % paroxysmal) were analyzed with 185 patients (68%) with a mean CHADS2 score of 1.22 ± 1.0 and mean CHA2DS2VASc score of 2.12 ± 1.5 were free of AF 115.6 ± 23 days post-ablation. The remaining 89 patients (32%) had recurrent AF at 111.5 ± 36 days post-ablation with a mean CHADS2 score of 1.49 ± 1.0 (p= 0.037), and the mean CHA2DS2VASc score was 2.52 ± 1.48 (p= 0.04).

At the long term follow up 144 patients (53%) remained free of AF at 339.7 ± 101.3 days with a mean CHADS2 score of 1.23 ± 1.06 and mean CHA2DS2VASc score of 2.17 ± 1.57. A total of 108 patients (39%) had recurrent AF at 339.7 ± 101.2 days with a mean CHADS2 score of 1.5 ± 1.06 (p= 0.043), and the mean CHA2DS2VASc score was 2.44 ± 1.49 (p= 0.171). A total of 22 patients were lost to long term follow up. There was no correlation between CHADS2 and CHA2DS2VASc score and peri-procedural complications.

Conclusions: There is a significant and inverse correlation between both the CHADS2 and CHA2DS2VASc scores and the likelihood of successful AF ablation at short term follow up which persists to some degree in long term follow up. Despite this, an increase in either score does not appear to increase procedural risk.